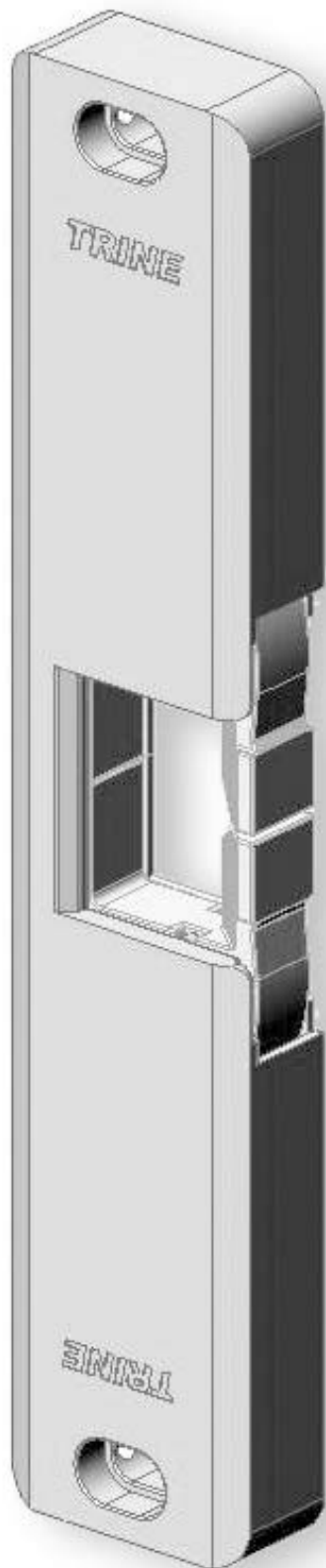


# AXION

PREMIUM ELECTRIC STRIKES

# 4800 SERIES

# INSTALLATION INSTRUCTION



## **TRINE 4800 SERIES SURFACE MOUNT ELECTRIC STRIKE**

Congratulations on the purchase of this quality TRINE security product. This product has been designed to install easily, perform reliably, and provide years of trouble free security.

**BEFORE PROCEEDING** with your installation, please review the following list of features. If you have any questions after reading this document please call TRINE's TECHNICAL SUPPORT (718) 829-2332 EXT. 447, or visit the TRINE Web site at [www.TrineOnline.com](http://www.TrineOnline.com)

### **SURFACE MOUNTING:**

Unit only requires the drilling of (3) holes\*

### **\*ANCHORING SYSTEM: (Included)**

Uniquely designed optional (4) four pin anchoring system provides additional support beyond the standard two tapped mounting holes.

### **ONE PIECE LOCKING MECHANISM:**

Our patent pending locking mechanism only has one mechanism providing incredible strength, durability and reliability due to fewer moving parts.

### **STAINLESS STEEL CONSTRUCTION**

### **FAIL SECURE/FAIL SAFE FIELD SELECTABLE:**

Unit is supplied with fail safe spring that is changed in the field when desired.

### **1,500,000+ LIFE CYCLE TESTED**

### **3,000+ LBS. HOLDING FORCE**

### **STEEL SPACER:**

We supply a 1/8" thick spacer for those installations that require mounting the strike closer to the panic bar. In addition, the spacer is used as a template during installation.

### **4800 & 4801 - 12 THRU 24 AC/DC OPERATING VOLTAGE:**

Expanding the use of our popular LC unit in the 3000 series, the 4800/4801 has this unit built in providing the flexibility along with surge and kickback protection.

VOLTAGE	PULL IN / HOLD AMPS	DUTY	SOUND
12DC	.566/.217	Intm./Cont.	Silent
24DC	.253/.099	Intm./Cont.	Silent
12AC	.509/.181	Intm./Cont.	Silent
16AC	.402/.149	Intm./Cont.	Silent
24AC	.215/.087	Intm./Cont.	Silent

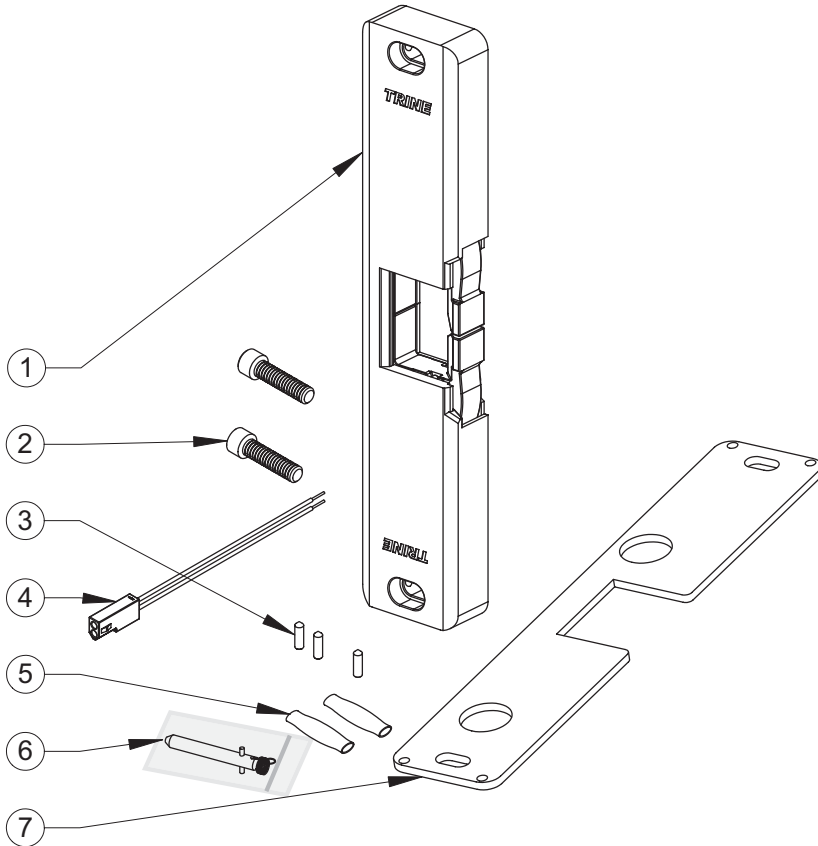
### **AVAILABLE FINISHES**

- US3** - Bright Brass
- US4** - Satin Brass
- US10** - Satin Bronze
- US10B** - Dark Bronze
- US26** - Bright Chrome
- US32D** - Satin Stainless Steel



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## WHAT IS INCLUDED IN THE BOX:



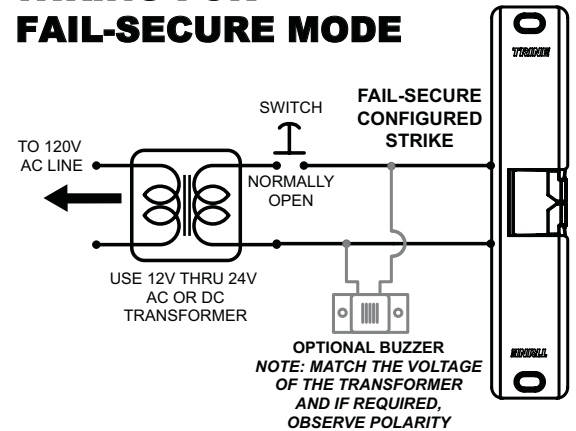
### INCLUDED IN THE BOX ARE:

- ① - (1) Surface Mounted Strike
- ② - (2) 1/4-20 x 1 inch UH Cap Socket Mounting Screws
- ③ - (4) Anchor System Pins
- ④ - (1) Quick Connect Socket and Wire Assembly
- ⑤ - (2) Sealed Crimp Connectors
- ⑥ - (1) Fail Safe Spring (RED colored) & Solenoid Plunger
- ⑦ - (1) 1/8 inch Thick Spacer Plate/Frame Mounting Template

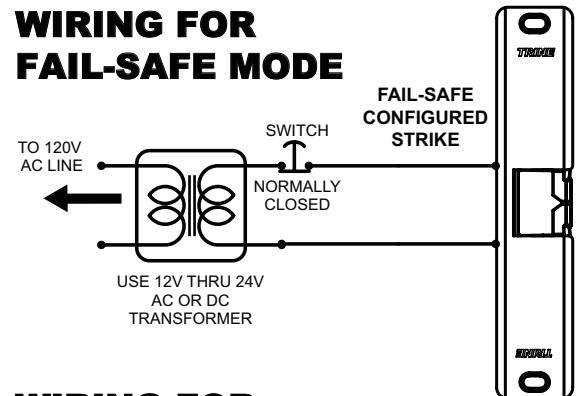
## RECOMMENDED TOOLS:



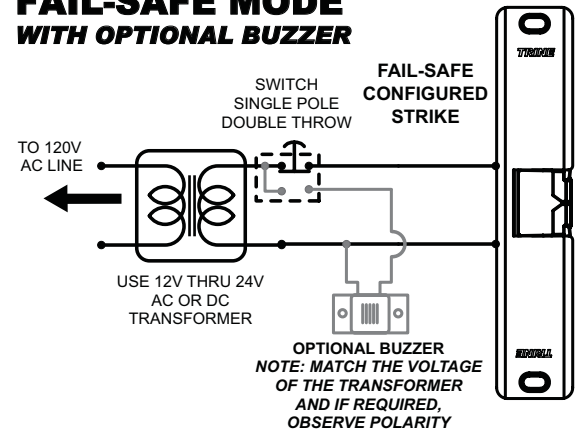
## WIRING FOR FAIL-SECURE MODE



## WIRING FOR FAIL-SAFE MODE



## WIRING FOR FAIL-SAFE MODE WITH OPTIONAL BUZZER



## RECOMMENDED PREINSTALLATION CHECK FOR 4800 SERIES SURFACE MOUNT STRIKE

1. Determine that door is properly adjusted; Door must operate properly in order for system to provide best results.
2. Door must swing properly, without interfering with jamb or sill
3. The door should be equipped with a door closer and the door closer "latch mode" must hold door in a completely closed position in order to avoid the lock latch from applying pressure against the releasing latch portion of the electric strike.
4. Electrical wire connections must be completed and ready to be terminated inside the frame.
5. Confirm that the power line in the frame is the correct voltage and that the switch works properly.
6. Confirm proper clearance exists between the end of the lock latch and jamb.
7. The electric door strike must be aligned properly with lock latch when it is installed on the doorjamb.
8. For best installation results, the door frame must be reasonably flat and straight.

## INSTALLATION PROCEDURE:

**CAUTION: TO AVOID ELECTRICAL SHOCK AND INJURIES, BEFORE DOING YOUR WIRING, TURN OFF THE POWER FROM THE CIRCUIT BREAKER.**

1. Mark the end position of the exit devices latchbolt on the doorframe. (Take off the original strike if present). See Figure 1.

2. Using the marks you just made as your guide, position the 4800 over the mark on the frame. Make sure that the Auxiliary latch rides up properly over the 4800's edge, and is engaged, and that the door is in the fully closed position. See Figure 2

3. When you are confident with the position of the 4800, mark two perpendicular edges of the 4800 on the frame. See Figure 3

4. Put the 4800 aside for a moment and place the spacer supplied with the 4800 inside the marks you just made on the frame.

5. Using the spacer as a template; mark the two mounting holes and the wire exit hole. If you are using the optional anchor pins, mark the anchor pin positions using the spacer as a template. See Figure 4

6. Using a #7 bit, drill the two mounting holes and tap them 1/4-20.

7. Using a 3/4 inch diameter bit, drill the power wire exit hole.

8. If you are utilizing the anchor pin system, use a #30 bit, drill the four anchor pin holes.

9. Deburr any sharp edges around the holes after drilling, so that the 4800 will rest on a smooth clean surface and the wires will not be accidentally cut or damaged while installing.

10. Pull the power wiring down the door frame and through the 3/4 inch diameter power wire hole.

11. Using the provided sealed crimp connectors, terminate the quick connect socket assembly to the power wires. See Figure 5 (NOTE: The 4800 is none polarized)

12. If you intend to use the anchor pins system, insert them into the four holes on the back side of the 4800. See Figure 6. If you also intend to use the 1/8" thick spacer plate, you can now slip the plate over the pins.

13. Snap together the power supply side connector coming off the frame to the 4800 connector. Carefully push the wires and connectors back into the frame.

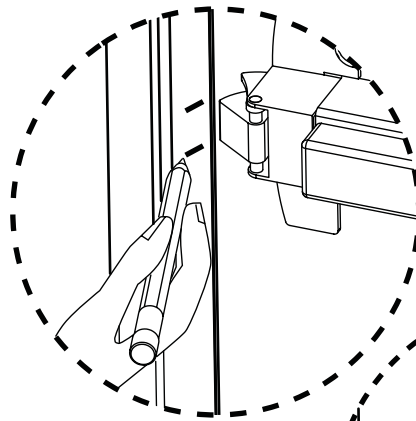
14. Using the 2 mounting screws, mount the 4800 strike to the frame.

15. Adjust the strike to the desired position and tighten the mounting screws using the 3/16 inch Allen wrench.

16. Using the 3/32 inch Allen wrench turn the two setscrews on the side of the 4800 until they support the strike. **DO NOT** over tighten the setscrews.

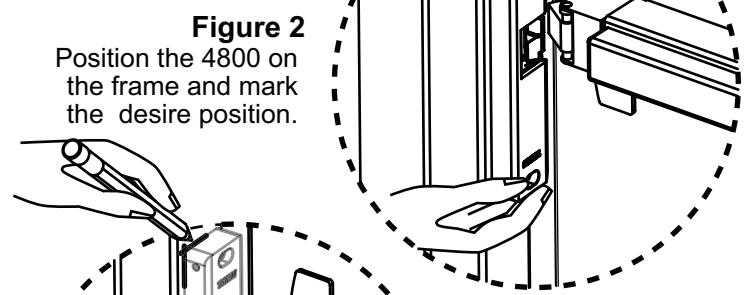
17. Turn the power ON and test your installation.

18. Installation is now complete.



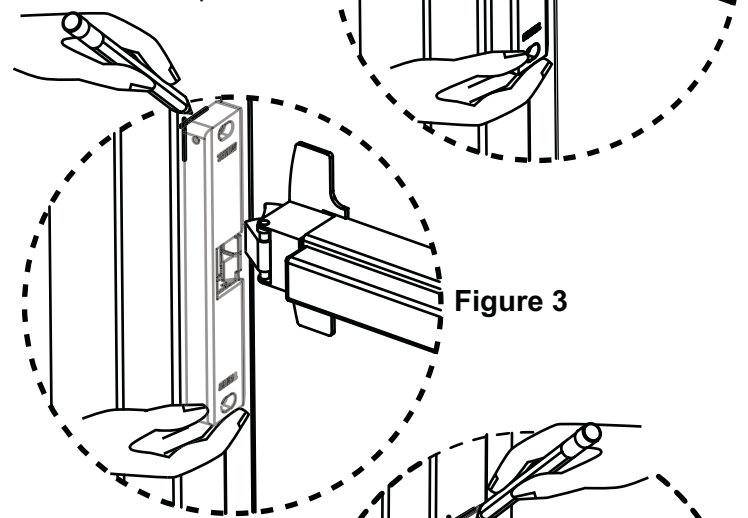
**Figure 1**

With the door closed, mark the position of the bolt on the frame.

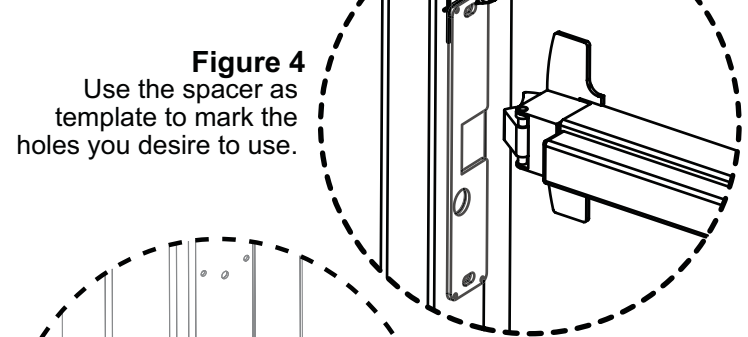


**Figure 2**

Position the 4800 on the frame and mark the desire position.

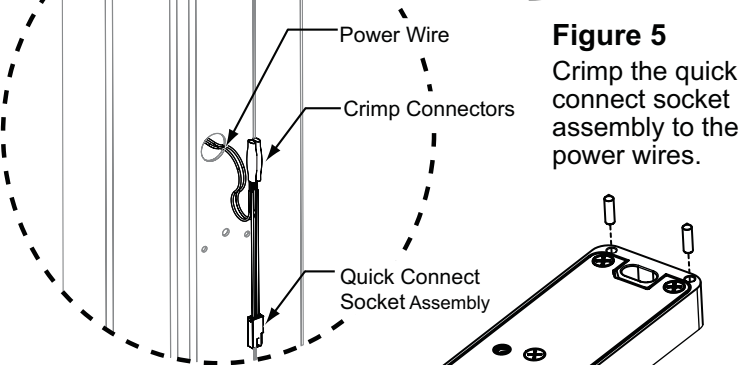


**Figure 3**



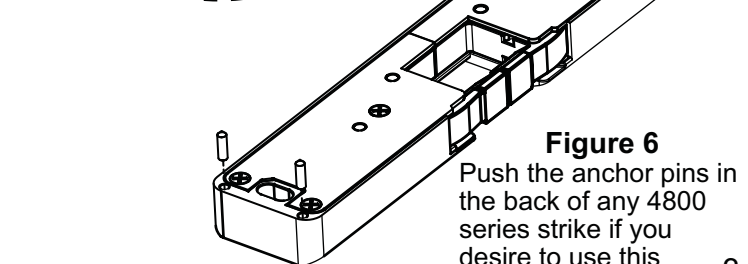
**Figure 4**

Use the spacer as template to mark the holes you desire to use.



**Figure 5**

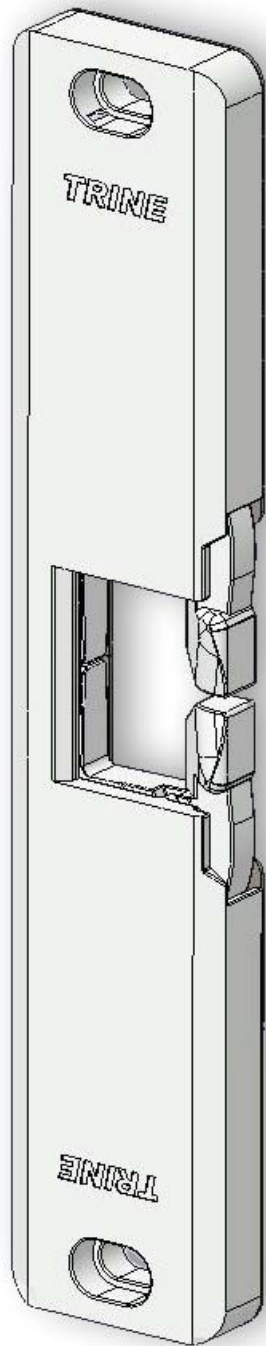
Crimp the quick connect socket assembly to the power wires.



**Figure 6**

Push the anchor pins in the back of any 4800 series strike if you desire to use this

# 4850 HALF-MOUNTED SURFACE



### STEEL SPACER:

Use the 1/8" thick spacer for those installations that require mounting the strike closer to the panic bar. In addition, the spacer is used as a template during installation.

### 12 THRU 24 VDC (ONLY) OPERATING VOLTAGE:

Expanding the use of our popular LC unit in the 3000 series, the 4850 has this unit built-in electronic that will provide the flexibility along with surge and kickback protection.

VOLTAGE	PULL IN / HOLD AMPS	DUTY	SOUND
12DC	.500/.178	Intm./Cont.	Silent
16DC	.385/.131	Intm./Cont.	Silent
24DC	.255/.084	Intm./Cont.	Silent

### AVAILABLE FINISHES

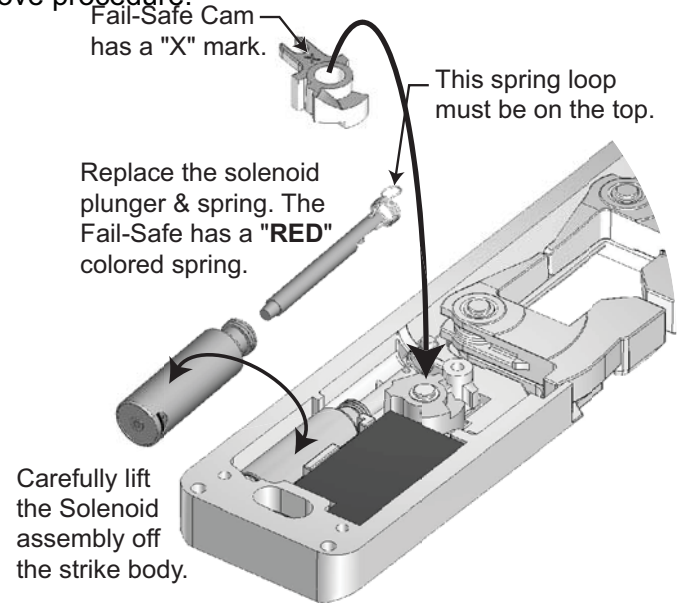
US32D/BHMA 630 - Satin Stainless Steel

US10B/BHMA 640 - Dark Bronze

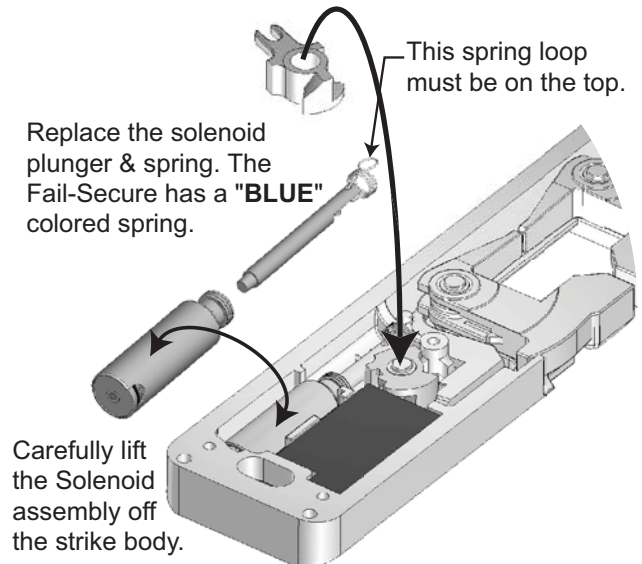
## INSTRUCTIONS FOR CHANGING THE 4850 SURFACE MOUNT FROM FAIL SECURE TO FAIL SAFE AND VICE VERSA:

To change the Fail Secure 4850 into a Fail Safe 4850, open the mechanism side of the 4850 (as shown below) by removing the mechanism cover screws (3 places) and the cover (the side with wire lead). Lift the solenoid and gently pull off the Fail Secure solenoid plunger and BLUE spring assembly and replace it with the Fail Safe plunger and RED spring assembly. Pull off the Fail Secure actuator cam, and slip in the Fail Safe cam (this cam is marked with an "X" as shown on the picture below). Before closing the unit, make sure that the wires are properly seated on the wire channel. Save the Fail Secure plunger and BLUE colored spring for future use.

For changing from Fail Safe to Fail Secure, just reverse the above procedure.



**FAIL-SAFE ASSEMBLY**



**FAIL-SECURE ASSEMBLY**



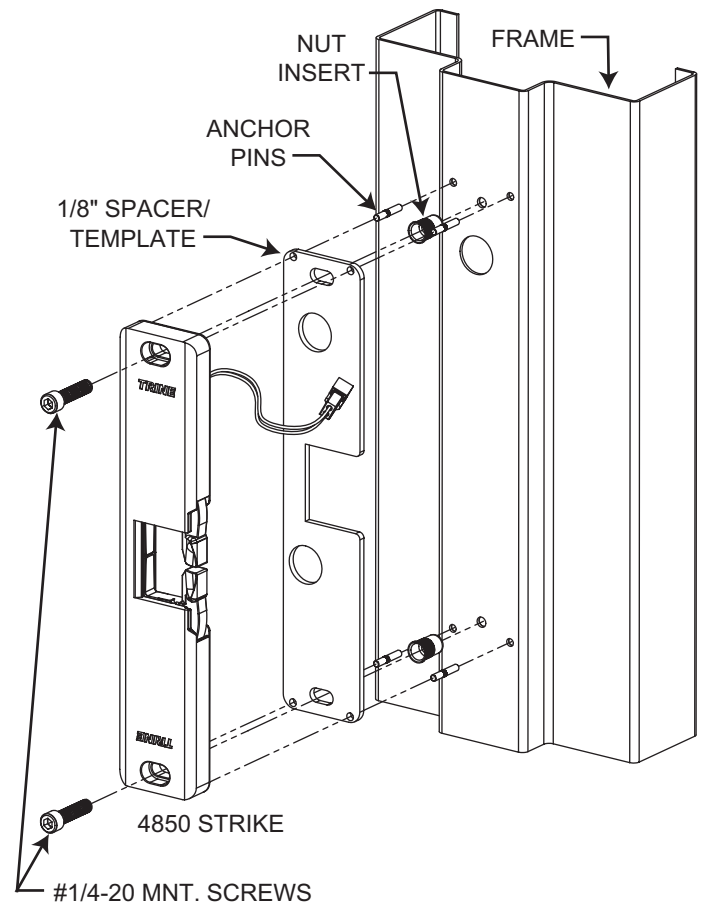
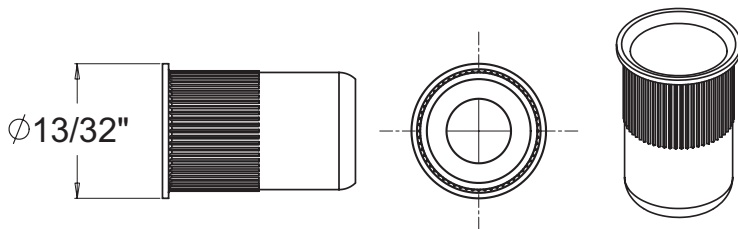
## 4850 INSTALLATION:

The installation of the 4850 surface mounted strike is similar the 4800 and 4801. Please follow the instructions on **page 3** of this instruction sheet. **If needed, please refer to page 6 for troubleshooting the installation.**

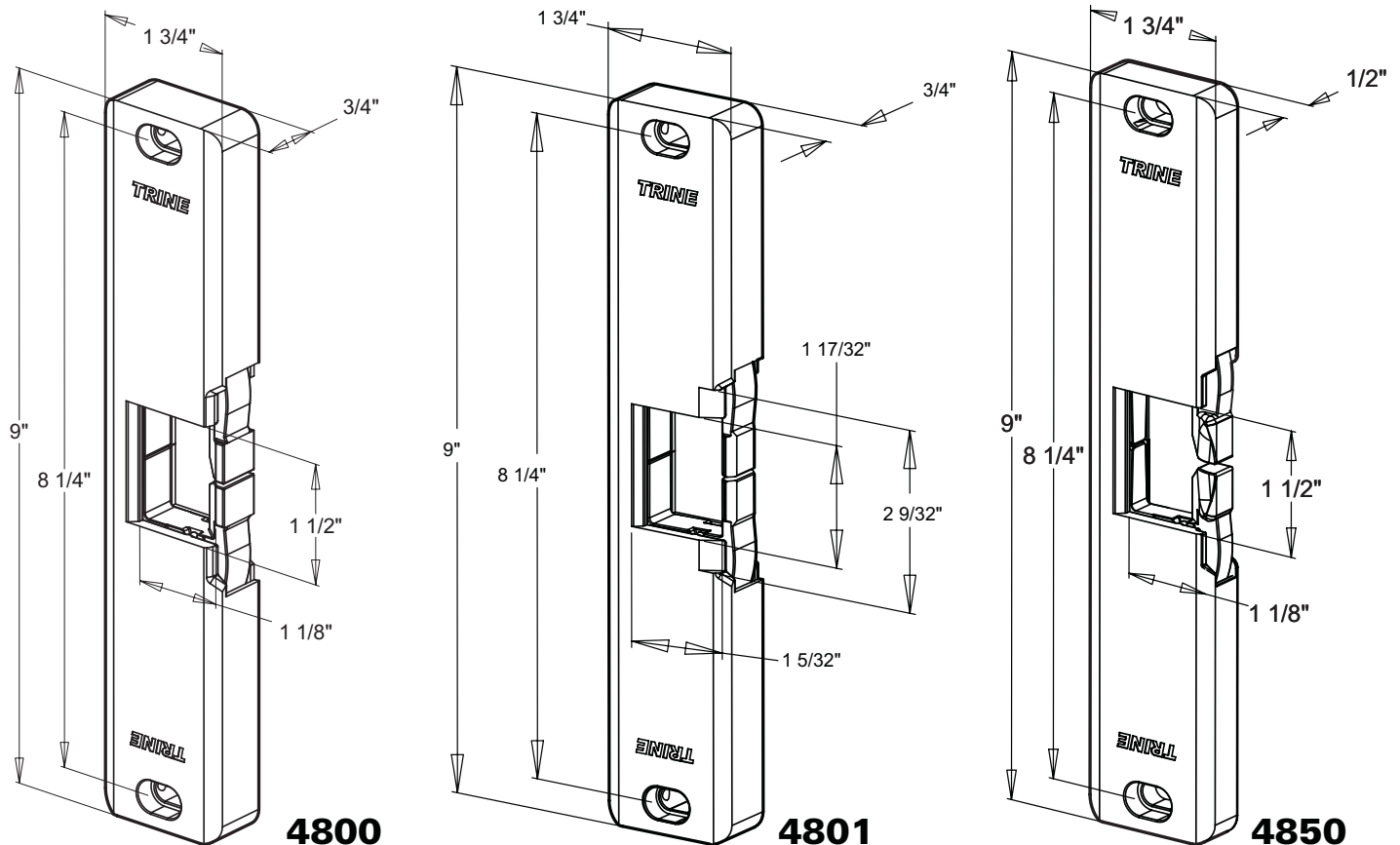
If the 4850 is to be installed in aluminum frames, it is recommended that the installer use a nut insert for the #1/4-20 mounting screws. The 4850 provides clearance for the head of the nut insert but for only the ones that have a small flange on them. See the recommended dimension for the flange below.

There are many companies that make the nut insert, for example, PEM® fasteners, ENFASCO Inc.®, ... etc., please refer to their catalogs for the proper part number.

PREFERRED NUT INSERT



## 4800 SERIES STRIKE DIMENSIONS:

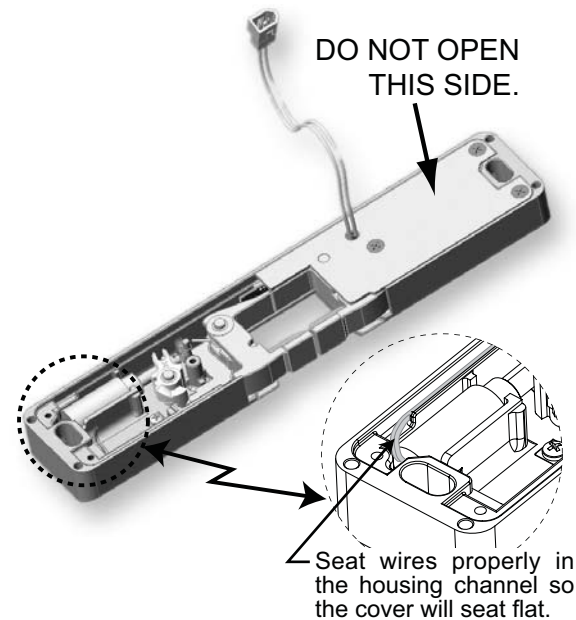


USE WITH THE SECUREBOLT®  
OR SQUAREBOLT PANIC BARS®

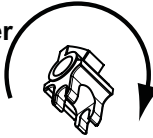
# INSTRUCTIONS FOR CHANGING THE 4800/4801 FROM FAIL SECURE TO FAIL SAFE AND VICE VERSA:

To change the Fail Secure 4800/4801 into a Fail Safe, open the mechanism side of the strike (as shown on the right) by removing the mechanism cover screws (3 places) and the cover. Lift the solenoid and gently pull off the solenoid plunger and BLUE spring assembly and replace it with the solenoid plunger and RED colored spring assembly. Pull off the actuator cam, and flip it to use the cam profile for Fail Safe (the side without an "X" mark). Before closing the unit, make sure that the wires are properly seated on the wire channel (see figure on right). Save the plunger and BLUE colored spring assembly for future use.

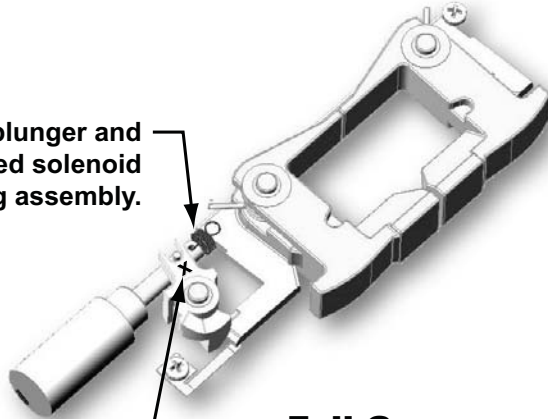
For changing from Fail Safe to Fail Secure, just reverse the above procedure.



Turn the actuator cam over to utilize the Fail Safe side of the cam profile.



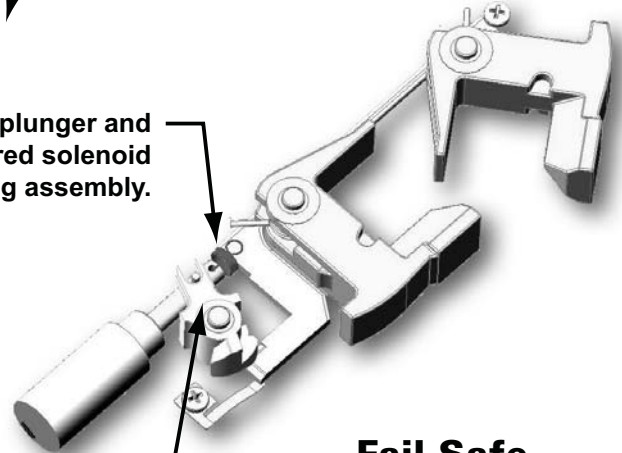
Use the plunger and BLUE colored solenoid spring assembly.



**Fail Secure Configuration (Standard)**

You should have the "X" mark on top of the actuator cam.

Use the plunger and RED colored solenoid spring assembly.



**Fail Safe Configuration**

You should NOT see the "X" on top of the actuator cam.

## TROUBLESHOOTING THE COMPLETED INSTALLATION

**SYMPTOM:** Electric release is not actuating:

1. Verify proper voltage is present AT STRIKE. If voltage is present: the strike may have been affected during the installation, or dirt or debris may be preventing proper operation. Inspect electric release and clean. **DO NOT LUBRICATE SOLENOID.**
2. If voltage IS NOT present:  
Verify Circuit breaker is on  
Verify voltage at the transformer/power supply output.  
Verify that there are no additional, external switches or devices which may be interrupting your circuit.  
Check for damaged wiring or bad wire splices.

**SYMPTOM:** Door will not open but strike is working

- Check for other locks on door

- Check for proper lock-latch engagement
- Check for excessive back pressure on door release latch by following these steps:  
Push the door from the outside to try and relieve the bolt to latch pressure and actuate the 4800. While the 4800 is unlatched swing the door open. If the door opens, then the bolt maybe applying pressure to the latch. Adjust the position of the 4800 to relieve the pressure.

Possible remedies include:

- Re-adjust (or install) a door closer
- Remove door silencers
- Correct excessive door warpage
- Re-center electric release in jamb
- Remove or trim weather stripping around the door



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